

## SECTION 07271

## UNDER-SLAB VAPOR RETARDER

1 PART 1 GENERAL

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 specification sections, apply to work of this section.

1. Vapor Retarder, seam tape, and pipe boots.

## 1.2 SECTION INCLUDES

A. American Society for Testing and Materials (ASTM)

1. ASTM E 1745 Standard for Plaster Water Vapor Retarders Used in Contact with Soil or Granular Fill Under Concrete Slabs
2. ASTM E 154 Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs
3. ASTM 96 Standard Test Methods for Water Vapor Transmission of Materials
4. ASTM E 1643 Standard Practice for Installation of Water Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs

B. American Concrete Institute (ACI)

1. ACI 302.1R-6 & 7 Section 3.2.3 Vapor Retarder

## 1.3 SUBMITTALS

A. Testing/Specifications

1. Independent laboratory tests results showing compliance with ASTM & ACI Standards.
2. Manufacturer's samples, literature.
3. Manufacturer's installation instructions for placement and seaming.

2 PART 2 PRODUCTS

## 2.1 MATERIALS

A. Provide a vapor retarder, which meets ALL criteria for Class A, per ASTM E-1745. Supplied material must be printed with "Meets ASTM E-1745 Class A" a minimum of 1 time per 500 square fee.

- B. Equal to Vapor Block 15, by Raven Industries (800) 635-3456.

## 2.2 ACCESSORIES

- A. Seam Tape:

- 1. Vapor Bond Tape, by Raven Industries (800) 635-3456 or other 4" wide tape approved by vapor retarder manufacturer.

- B. Pipe Boots:

- 1. Raven VaporBoot or other manufacturer's supplied pipe boot.

## 3 PART 3 EXECUTION

### 3.1 PREPARATION

- A. Ensure that subsoil is approved by architect.

- 1. Level and tamp or roll aggregate, sand or tamped earth base.

### 3.2 Installation

- A. Install Vapor Retarder:

- 1. Installation shall be in accordance with manufacturer's instructions and ASTM E 1643.
  - a. Unroll Vapor Retarder with the longest dimension parallel with the direction of the pour.
  - b. Lap Vapor Retarder over footings and seal to foundation walls.
  - c. Overlap joints 6 inches and seal with Vapor Bond Tape or other 4" wide pressure sensitive tape.
  - d. Seal all penetrations (including pipes) with manufacturer's pipe boot.
  - e. No penetration of the Vapor Retarder is allowed except for reinforcing steel and permanent utilities.
  - f. Repair damaged areas by cutting patches of Vapor Retarder, overlapping damaged area 6 inches and taping all four sides with Vapor Bond Tape or other 4" wide pressure sensitive tape.

...END OF SECTION